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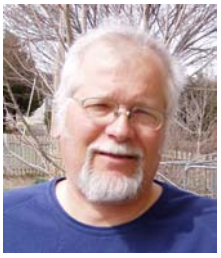

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Plant Disease in Kansas

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HIGHLIGHTS

The wheat streak disease cycle has started. Volunteer wheat was common over much of western Kansas after frequent rains during the past month. Wheat streak mosaic was found in some of the volunteer fields recently in Rush County in central Kansas.

Asian soybean rust remains to the south of Kansas in Louisiana and Texas although the past month's precipitation patterns have been favorable in the state.

Sunflower rust in western Kansas increased dramatically in the last two weeks of August.

In sorghum and soybean, disease levels are low as the crops mature across the state.

Pine wilt continues to kill trees in parts of south central Kansas. About 5% of the trees were killed this year in northwest Sedgwick County.

OUTLOOK

Pine wilt will continue to be seen this fall. Look for this disease in windbreaks and landscapes in the eastern half of Kansas. Because of

widespread volunteer and early planting of wheat, October weather if warm and dry could spell problems again for growers. Wheat streak mosaic will invade fields as last year if dry warm weather is the norm.

COTTON

Bacterial blight was reported for a second time in Kansas. Trace levels of the disease were found in a field in Cowley County. Previously, the disease had a report in 2004 in neighboring Sumner County in south central Kansas.

PINES

In mid August (Report 5), pine wilt nematode was found in Thomas County (NW) as a result of introduction by movement of infested firewood. Subsequent survey has not found any more infection in the nearby pines and it is hoped that the infestation has been eliminated.

In central Kansas, the disease has spread to Rice County. This likely was the result of natural infestation westward from neighboring Reno or McPherson counties. In survey of counties near Rice, the pine wilt was epidemic and taking out complete windbreaks of Scots pine. McPherson, Reno, and Sedgwick have pockets of disease at extremely high levels.

Figure 1. Pine wilt in a Reno County windbreak of Scots Pine.

SORGHUM

Disease levels have been extremely low this summer because of dry weather patterns. During the past four weeks, frequent precipitation has allowed for a small increase in disease pressure. Rust, sooty stripe and bacterial stripe were noted in eastern Kansas fields. Sorghum ergot has not been reported in the state this year although a

Section 18 for *Tilt* fungicide was granted. Late flowering fields are now susceptible to infection.

SOYBEAN

The past month has changed much of the prediction of crop failure to the state's soybean crop. Rains have allowed beans to fill out and the state should see about an average crop. In early to mid August, charcoal rot was coming on strong in the eastern and central areas of the state. The rains and milder temperatures reduced stress on the crop and therefore stopped charcoal rot from becoming a major problem.

The crop is nearing maturity in many areas of the state and not at risk to late infection caused by Asian soybean rust.

SUNFLOWER

Sunflower rust in late August and early September increased substantially in northwest Kansas. This increase in disease pressure likely though had minimal affect on the yield as much of the crop was nearing maturity and in the final stages of filling. Levels in mid August were about 5% leaf severity and jumped to 35-40% in irrigated fields of Sherman and Thomas counties.

Figure 2. Rust on sunflower, Sherman County.

Phomopsis stem canker was observed in about one quarter of the fields of northwest Kansas. 5-10% infection was noted in fields near Goodland.